

**PROCEEDINGS OF THE BROWN COUNTY  
PLANNING, DEVELOPMENT & TRANSPORTATION COMMITTEE**

Pursuant to Section 19.84 Wis. Stats., a regular meeting of the **Brown County Planning, Development & Transportation Committee** was held on Monday, February 28, 2011 in Room 162 – Ag & Extension Center – 1159 Bellevue Street,, Green Bay, WI

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**Present:** Bernie Erickson, Mike Fleck, Dan Haefs, Dave Kaster  
**Excused:** Norb Dantine  
**Also Present:** Attorney Fred Mohr, Debbie Klarkowski, Bill Bosiacki, Brian Lamers, Chuck Larscheid, Judy Knudsen, Executive Tom Hinz  
Supervisors Andy Nicholson, Mary Scray, Other Interested Parties

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- I. **Call Meeting to Order:**  
The meeting called to order by Chairman Bernie Erickson at 6:27 p.m.
- II. **Approve/Modify Agenda:**  
Items were taken out of order, although shown in proper format here.  
  
**Motion made by Supervisor Fleck and seconded by Supervisor Kaster to approve the agenda as modified. MOTION APPROVED UNANIMOUSLY**
- III. **Approve/Modify Minutes of January 24, 2011:**  
I  
**Motion made by Supervisor Kaster and seconded by Supervisor Fleck to approve. MOTION APPROVED UNANIMOUSLY**
1. **Review Minutes of:**
  - a. Harbor Commission (December 13, 2010):
  - b. Planning Commission Board of Directors (December 1, 2010):  
**Motion made by Supervisor Fleck and seconded by Supervisor Haefs to suspend the rules and receive and place on file 1a and 1 b together. MOTION APPROVED UNANIMOUSLY**

**Closed Session:**

2. **A Closed Session may be held for consideration of County Labor Agreement Negotiations and strategy pursuant to Wis. Stat. 19.85 (1)e. "Union Contracts:**  
  
**Motion made by Supervisor Haefs and seconded by Supervisor Kaster to enter into Closed Session at 6:30 p.m. Roll Call:**  
**Present:** Erickson, Fleck, Haefs, Kaster  
**Excused:** Dantine  
**MOTION APPROVED UNANIMOUSLY**

**Motion made by Supervisor Haefs and seconded by Supervisor Kaster to return to regular order of business at 7:20 p.m. Roll Call:**

**Present: Erickson, Fleck, Haefs, Kaster**

**Excused: Dantinne**

**MOTION APPROVED UNANIMOUSLY**

**Communications:**

3. **Communication from Supervisor Nicholson: I am requesting reconsideration on the sale of the VandeHey and Sanderfoot property for \$1.2 million. This item was #9 on the PD & T Committee of 12/7/10 and approved at the County Board meeting on 1/29/10. Referred from February County Board:**

Supervisor Andy Nicholson asked for reconsideration of a previous vote by this committee and the County Board to sell the VandeHey/Sanderfoot property. Clarification of the term "reconsider" was asked of Attorney Mohr, who stated that reconsideration means to reconsider the whole question, not just the vote.

Chairman Erickson stated he has been informed that the selling price of \$7500 an acre, or \$1.2 million, is a very good price, as most property in the county is selling in the \$6,000 range. Supervisor Haefs indicated that the understanding of this committee was that the land would never be used for a landfill as the Town of Wrightstown would not approve it.

Supervisor Scray indicated that although she would not change her vote, was of the opinion that the original citing process was not handled in the best way. Chuck Larscheid disagreed with that, explaining the citing and negotiation phase that was done, stating that Wrightstown did not want a landfill in their township and would not approve it.

**Motion made by Supervisor Haefs and seconded by Supervisor Fleck to approve the sale of the VandeHey and Sanderfoot property for \$1.2 million**

**Ayes: Fleck, Haefs, Erickson**

**Nays: Kaster**

**MOTION APPROVED 3-1**

**Carryover Funds:**

4. **Planning, Development & Transportation 2010 to 2011 Carryover Funds:**  
Carryover funds for Land Conservation, Planning & Land Services, Register of Deeds, and Highway Capital Projects were recommended for approval.

**Motion made by Supervisor Haefs and seconded by Supervisor Fleck to approve. MOTION APPROVED UNANIMOUSLY**

**UW-Extension:**

5. **Grant Application Review (#11-02): Risk Management Educator – Grantor: North Central Risk Management Education Center:**

Ms. Knudsen explained that this grant will fund the existing Community Garden Coordinator position in the amount of \$39,200. There are no matching funds required.

**Motion made by Supervisor Fleck and seconded by Supervisor Haefs to approve. MOTION APPROVED UNANIMOUSLY**

**6. Grant Application Review (#11-03): CSI Kits – Grantor: Wisconsin 4H Foundation:**

Ms. Knudsen explained that funding is being sought to create CSI kits for the new 4-H Science, Engineering and Technology project. Kits will be available for check-out by 4-H clubs in Brown County in order to implement projects at the club level. Grant is for \$500 with no matching resources required.

**Motion made by Supervisor Fleck and seconded by Supervisor Kaster to approve. MOTION APPROVED UNANIMOUSLY**

**7. Grant Application Review (#11-05): 4-H Forensics Science Project – Grantor: Eastern District Resource Management Team Grant:**

This grant is for the purpose of piloting a new 4-H forensics project in Brown County. Grant funding in the amount of \$5,000 will be used to increase hours of the 4-H Program Assistant.

**Motion made by Supervisor Fleck and seconded by Supervisor Haefs to approve. MOTION APPROVED UNANIMOUSLY**

**8. Grant Application Review (#11-05): 4-H Forensics Science Project – Grantor: WI 4-H Learning Resource Fund:**

The purpose of this grant is to pilot a new 4-H forensics project in Brown County. It is in the amount of \$2,000 and no matching funds are required.

**Motion made by Supervisor Kaster and seconded by Supervisor Haefs to approve. MOTION APPROVED UNANIMOUSLY**

**9. Director's Report:**

Judy Knudsen distributed highlights relative to the 2010 UW-Extension Annual Report (attached). The report includes updates on consumer and commercial horticulture, square foot gardening, cottonwood research, poverty simulations, invasive species, food and hunger network, household food security survey, lower Fox Basin project, dairy management, geospatial 911 community service learning project, etc.

Also distributed was a report on invasive plant species located in the county (attached). Knudsen explained that their program accomplished several objectives in the spring and summer of 2010, one of the more significant being control of garlic mustard. She indicated that Phragmites can be found in many areas of the county and an effort is being made to keep it sprayed. There was one major insect threat in 2010 involving Japanese beetles.

Also attached is information on Bill Wright, Community Garden Coordinator for the UW-Extension.

**Motion made by Supervisor Kaster and seconded by Supervisor Fleck to receive and place on file. MOTION APPROVED UNANIMOUSLY**

**Planning and Land Services**

**Planning Commission**

**10. Update regarding County Farm Property:**

Mr. Lamine distributed a memo in reference to the County Farm property (attached). He indicated that in response to the request for an update regarding potential sale of the vacant property, an analysis of the present economic conditions as they apply to land sales and development activity was completed. A review of sales of vacant land in Brown County revealed few, if any, sales. A significant backlog inventory of vacant subdivided lots was noted within Brown County, in addition to a number of residences that have been foreclosed.

Lamine indicated that if the County Farm property would be sold but not developed and left in an agricultural use, taxes would be based on agricultural rather than fair market value. Presently, the 82 acres of the County Farm land is leased to a farmer for \$4,260 per year. Lamine stated that given the existing market conditions, it may be advantageous to wait until land prices go up before considering sale.

Discussion by the committee resulted in a request that Lamine update them again in six months.

**Motion made by Supervisor Haefs and seconded by Supervisor Kaster to review in six months.**

**MOTION APPROVED UNANIMOUSLY**

**Zoning:**

**11. 2010 Annual Report:**

Bill Bosiacki gave highlights of the Brown County Zoning Department 2001 Annual Report as included in packet material including sanitary permits issued, gravity flow onsite waste systems, pressure onsite waste systems, holding tank pumping, property transfer inspections and maintenance program, shoreland permits issued, inspections, etc.

**Motion made by Supervisor Fleck and seconded by Supervisor Haefs to receive and place on file.**

**MOTION APPROVED UNANIMOUSLY**

**Highway:**

**12. January 2011 Budget to Actual:**

Brian Lamers pointed out that numbers in this report were incorrect and that he would be providing an update.

**Motion made by Supervisor Kaster and seconded by Supervisor Fleck to receive and place on file. MOTION APPROVED UNANIMOUSLY**

13. **Initial Resolution authorizing the issuance of not to exceed \$15,750,000 Corporate Purpose General Obligation Bonds or Notes of Brown County Wisconsin in one or more series at one or more times.**
- a. **Highways – CTH AAA (Oneida Street), CTH KB (Wisconsin Avenue-Main Street), CTH H (South Broadway Street) Bridge, CTH X (CTH PP to STH 57), CHT T (Caledonia Drive to STH 57)< CTD D (CTH Z to STH 96) CTH MM (CTH G to Shadow Lane)< CTH D (CTH Z to Plum Creek, and CTH DD 9VanDyke Road to TYH 96) – \$7,990,000.**

Mr. Lamers pointed out that of the total \$15,750,000 in general obligation bonds that will be issued, \$7,990,000 is for the above highway projects.

**Motion made by Supervisor Fleck and seconded by Supervisor Kaster to approve the issuance of General Obligation Bonds for the Highway Department projects in the amount of \$7,990,000.**  
**MOTION APPROVED UNANIMOUSLY**

14. **Director's Report:**

Mr. Lamers highlighted the following activities in the Highway Department:

- A field system update at Duck Creek per a new law requirement has a deadline of 12/31/2014. Preliminary estimate is \$150,000.
- Trucks are being fitted with GPS units, which are being funded by the state. This equipment will provide information relative to how much salt is used and will have sensors on plows which will show where they are on the roads, etc.
- A new accounting/inventory system used by other counties (CHEM) is being researched as the present system is not supported by the new financial system recently installed by the County.

**Motion made by Supervisor Fleck and seconded by Supervisor Kaster to receive and place on file. MOTION APPROVED UNANIMOUSLY**

**Port & Solid Waste:**

15. **Resolution re: International Migratory Bird Day;**  
Chuck Larscheid explained that since 1993 International Migratory Bird Day (MBD) has become a primary vehicle for focusing public attention to the nearly 350 species that travel throughout North America and other areas. Traditionally MBD has been held the 2<sup>nd</sup> Saturday in May. This resolution would set the second Saturday in May (the 14<sup>th</sup> in 2011) as International Migratory Bird Day in Brown County.

**Motion made by Supervisor Fleck and seconded by Supervisor Kaster to approve May 14<sup>th</sup> as Migratory Bird Day.**  
**MOTION APPROVED UNANIMOUSLY**

16. **Resolution re: Approving Three-Year Agreement of Intentions for Wisconsin Department of Transportation's Harbor Assistance Program:**

Larscheid explained that approval of this 3-year Harbor Development Statement of Intentions is in the best interest of the Port and recommended approval. He pointed out that the projects are funded through the Wisconsin Department of Transportation's Harbor Assistance Program and would involve no levy impact.

Projects include:

- Dock Renovation and Dredging Noble Petro
- Leicht Transfer & Storage State Street Dock Wall (2 projects)
- Dredge North Dock for KK Integrated Logistics, Inc.
- East Shore Public Port Terminal
- Western Lime Corporation's North Dock Wall
- Green Bay Harbor Navigational Channel Deepening Project
- Port of Green Bay Slip & Dock Wall Deepening Project
- West Shore Public Port Terminal

**Motion made by Supervisor Fleck and seconded by Supervisor Kaster to approve. MOTION APPROVED UNANIMOUSLY**

**17. Cat Island National Resources Damage Assessment Agreement – Request for Approval:**

A letter from the Fox River/Green Bay Natural Resource Trustee Council offering to allocate \$800,000 toward the proposed Cat Island Restoration Implementation Project was reviewed. Recommendation was made to approve.

**Motion made by Supervisor Kaster and seconded by Supervisor Fleck to approve. MOTION APPROVED UNANIMOUSLY**

**18. Renard Isle Closure Update:**

Larscheid reported that cell #2 at Bay Port has been emptied onto the island, and the next cell to be emptied will be #8. He indicated that the county's portion of the project will shortly be completed and the grant used. He is hopeful that the entire project will be completed in 2011, although expressed concern with the Corp of Engineer's portion being funded by the Federal government.

**Motion made by Supervisor Haefs and seconded by Supervisor Kaster to receive and place on file. MOTION APPROVED UNANIMOUSLY**

**19. 2010- Annual Report – Great Lakes Maritime Task Force:**

Larscheid highlighted the 2010 annual report of the Great Lakes Maritime Task Force, pointing out the impact of the dredging crisis on per-trip carrying capacity in the various vessel classes. The goal of the Task Force is to restore adequate funding for dredging the Great Lakes deep-draft ports and waterways in order to expand domestic and international trade.

**Motion made by Supervisor Kaster and seconded by Supervisor Haefs to receive and place on file. MOTION APPROVED UNANIMOUSLY**

**20. Economic Impact of WI Commercial Ports:**

Larscheid pointed out that Wisconsin's commercial ports are major economic hubs which generate thousands of family supporting jobs while also playing an increasingly important role in the state's tourism industry and quality of life. Specifically, the Port of Green Bay offers a direct route for shipments linking Midwest and International markets. It is served by major railroads and several nationally known truck lines.

**Motion made by Supervisor Kaster and seconded by Supervisor Fleck to receive and place on file. MOTION APPROVED UNANIMOUSLY**

**21. 2010 Port Tonnage:**

Information in packet material reported port tonnage in the categories of domestics, foreign imports, domestic exports, and foreign exports.

**Motion made by Supervisor Kaster and seconded by Supervisor Fleck to receive and place on file. MOTION APPROVED UNANIMOUSLY**

**22. Director's Report:**

Mr. Larscheid highlighted the following activities during the last reporting period:

- Oneida 7 Generation is looking for a location in the Green Bay area and a site on Broadway is being investigated.
- Associated Recycling of Wisconsin has awarded the Project of the Year to the Brown-Outagamie-Winnebago Counties MERF
- A new blower was installed at the East Landfill Gas to Energy facility
- Cellcom Marathon is scheduled for May 15<sup>th</sup>. They have requested Port closure on the Main Street bridge from 8:30 to 1:30.
- US Corp Dredge Material Management Plan is nearing completion and will be brought forward after peer review.

**Motion made by Supervisor Kaster and seconded by Supervisor Fleck to receive and place on file. MOTION APPROVED UNANIMOUSLY**

**Airport** – No agenda items

**Land Information** - No agenda items

**Property Listing** – No agenda items

**Other**

**23. Audit of Bills:**

**Motion made by Supervisor Fleck, seconded by Supervisor Haefs to approve audit of bills. MOTION APPROVED UNANIMOUSLY**

**23. Such Other Matters as Authorized by Law:**

**a. Location for the March PD& T meeting:**

March meeting of LCC & PDT will be held at the Austin Straubel Airport

**Motion made by Supervisor Kaster and seconded by Supervisor Fleck to adjourn at 8:55 p.m. MOTION APPROVED UNANIMOUSLY**

Respectfully submitted,

Rae G. Knippel  
Recording Secretary

PLANNING COMMISSION

Brown County



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CHUCK LAMINE, AICP

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PLANNING DIRECTOR

MEMORANDUM

DATE: February 28, 2011

TO: Planning, Development and Transportation Committee

FROM: Chuck Lamine, Planning Director

A handwritten signature in cursive script, appearing to read "Chuck Lamine".

RE: Update Regarding County Farm Property

At the January 24, 2011, meeting of the Planning, Development and Transportation Committee I was asked to provide an update regarding the potential sale of vacant Brown County Farm property adjacent to the Community Treatment Center. Sale of this property has been under consideration for several years. Staff of the Planning and Land Services Department even formed and worked with a Citizens Advisory Committee made up of representatives of Neighborhood Associations adjacent to the property. Several concept plans were developed and the committee traveled to the Madison area to tour several Traditional Neighborhood Development (TND) projects. Resistance was encountered from members of the Citizens Advisory Committee to the TND concept. As discussions continued, the nation entered into a prolonged economic and real estate downturn that has continued to this day. Several updates were provided to the Planning, Development and Transportation Committee but due to the downturn in the economy, it was concluded that it was not the best time for the County to pursue sale of the property.

In response to the request for an update regarding the potential sale of the vacant property, a brief analysis of the economic conditions as they apply to land sales and development activity has been completed. A review of Brown County Property Listing records has revealed few, if any, sales of vacant land to individuals active in land development within Brown County. In some cases, land purchased by developers for speculative future development is being sold to farmers for agricultural use. While it is impossible to definitively determine the reasons for such a downturn in activity, it is likely that challenging sales, credit challenges, and cash flow issues may be contributing factors.

We have also noted a significant backlog inventory of vacant subdivided lots within Brown County. Residences that had been foreclosed on have also complicated the housing market and reduced new home construction activity. The economic conditions have created a buyers market for existing homes. Many new homebuilders are purchasing undeveloped lots in existing



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subdivisions rather than developing new subdivisions. In general, it appears that it is a buyers market for vacant developable land such as the Brown County Farm property and the market is likely to be quite soft.

The following chart identifies three subdivisions recorded in the City of Green Bay in the year 2004 that are near the Brown County Farm property and a sample seven of the largest subdivisions recorded in Brown County in the year 2004. The chart identifies the name of the subdivision, as well as number of buildable lots, developed lots in 2005, (per air photographs), developed lots in 2010 (per air photographs), and vacant lots remaining in 2010 (per air photographs). The chart represents only a sample of 10 subdivisions recorded in 2004. Approximately 68 subdivisions were recorded in Brown County in 2004. This chart does not include the new subdivisions since 2004.

| Subdivision Name  | Municipality          | Number of Buildable Lots | Developed Lots in 2005 | Developed Lots in 2010 | Vacant Lots in 2010 |
|---|-----------------------|--------------------------|------------------------|------------------------|---------------------|
| Field of Dreams II  | Green Bay (City)      | 22                       | 5                      | 17                     | 5                   |
| Mahon Creek Estates   | Green Bay (City)      | 19                       | 0                      | 16                     | 3                   |
| Thomas J. Juza's Shorewood Heights 1 <sup>st</sup> Addition | Green Bay (City)      | 239                      | 0                      | 15                     | 224                 |
| Bower Creek Estates North                                   | Bellevue              | 81                       | 0                      | 57                     | 24                  |
| Glen Kent Estates 1 <sup>st</sup> Addition                  | Howard                | 91                       | 9                      | 78                     | 13                  |
| Grand Terra   | Ledgeview             | 48                       | 0                      | 30                     | 18                  |
| Nesting Meadows   | Wrightstown (Village) | 48                       | 0                      | 13                     | 35                  |
| The Ridges of Dollar Creek Replat                           | Ledgeview             | 62                       | 27                     | 46                     | 16                  |
| Shadow Ridge 2 <sup>nd</sup> Addition                       | Lawrence              | 69                       | 5                      | 66                     | 3                   |
| White Hawk Landing  | Howard                | 64                       | 8                      | 59                     | 5                   |
| <b>TOTAL</b>  |                       | <b>743</b>               | <b>54</b>              | <b>397</b>             | <b>346</b>          |

If the County Farm property is sold but not developed and left in an agricultural use, the property is taxed based on its agricultural use value rather than the fair market value. Presently, agricultural property in Brown County is taxed at approximately \$7.00 per acre. One hundred acres would result in \$700 in annual tax revenue of which only 30% (\$210) would be provided to Brown County. Presently, the 82 acres of the County Farm land is leased to a farmer for \$4,260 per year. Given the existing market conditions it may be advantageous to wait until land prices go up.

The Brown County Board of Supervisors has the following options regarding the vacant County Farm property:

1. Set a price for the land and list the sale of the property with a realtor.
2. Prepare a Request for Offers for purchase of the land with the following options:
  - a. Offer to purchase with no conditions to the sale beyond price.
  - b. Offer to purchase with a description of the development proposal.
  - c. Offer to purchase with a description of the development proposal and timeline for performance.
3. Hold the property until there is a stronger market that could result in a more favorable price.

Your county  
extension office



**UW  
Extension**  
Cooperative Extension  
Brown County

# UW-Extension 2010 Highlights

**Brown County UW-Extension**

**1150 Bellevue St., Green Bay, WI 54302-2259**

**Phone: 920-391-4610; Fax: 920-391-4617**

**Web: [www.browncountyextension.org](http://www.browncountyextension.org)**



## Annual Report

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You will find Brown County UW-Extension educators out in the county holding workshops to help dairy producers improve their profitability, teaching county residents how to garden, working with the green industry to identify and treat pests and diseases, presenting information to families about healthy eating and helping youth build robots that enable them to utilize math, science, and computer programming skills.

UW-Extension is an unique organization serving Brown County residents by providing knowledge and research from the University of Wisconsin-Madison. We provide information to help country residents make informed decisions.

The Brown County UW-Extension Office is a partnership with Brown County government and University of Wisconsin-Extension. Our UW-Extension network consists of county UW-Extension offices, and specialists based on the UW-Madison campus. Together, we respond to local needs with friendly advice, useful tips, one-on-one consultations and educational presentations.

Many of our educational efforts in 2010 continued to focus on helping individuals and families deal with the continued downturn in the economy. Additional efforts focused on addressing the impact of significant amounts of rain during the growing season.

Efforts will continue in 2011 to help individuals and families deal with a sluggish economy

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Through the University of Wisconsin-Extension, all Wisconsin people can access university resources and engage in lifelong learning, wherever they live and work.

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*University of Wisconsin, United States Department of Agriculture,  
and Wisconsin Counties cooperating.*

*University of Wisconsin-Extension provides equal opportunities in employment and programming, including Title IX and ADA.*

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## Consumer Horticulture

Gardening is the favorite hobby for many Americans (National Gardening Association, 2010). The average Wisconsin resident invests approximately \$650 on flowers, trees, shrubs, hired services, equipment and miscellaneous landscape products (Wisconsin Green Industry Survey, 2002). As an urban county there is a strong educational demand for reliable horticulture information.

A total of 2,312 consumers received horticulture information in 2008 and 2,457 in 2009.

Due to unique weather conditions in 2010, a significant number of Brown County residents experienced issues with their gardens, trees, shrubs and lawns. The Brown County UW-Extension Horticulture Office has available staff during the growing season to respond to horticulture questions.

Approximately 3,500 consumers obtained horticulture information from the Brown County UW-Extension Horticulture Educator and his support team through phone calls, walk-ins, and email. More than 1,500 copies of UW Extension publications and fact sheets were distributed to the public.

A plant health display booth was utilized during the growing season at the Green Bay Botanical Garden (GBBG) to provide timely information on various garden pest and disease issues. The educational display was showcased for about 168 days at the GBBG. Approximately 500 copies of UWEX publications and fact sheets were distributed through the booth and more than 50 consumers benefited on a weekly basis from May – October.

Five Master Gardener volunteers were trained by the Horticulture educator on proper tree planting techniques through an Arbor Day planting event at the Boys and Girls Club.

Forty-four news articles were written and published by the educator on a weekly basis and were circulated to more than 83,166 residents in Northeast Wisconsin. A total number of indirect teaching contacts through local newspaper:  $44 \times 83,166 = 3,659,304$ .



Trained by the educator, Master Gardeners are probing the depth of the root flare of a ball and burlapped tree.

## Square Foot Gardening

Square foot gardening is the practice of planning small but intensively planted gardens. The practice combines concepts from other organic gardening methods, including a strong focus on compost, closely planted raised beds and bio-intensive attention to a small, clearly defined area.

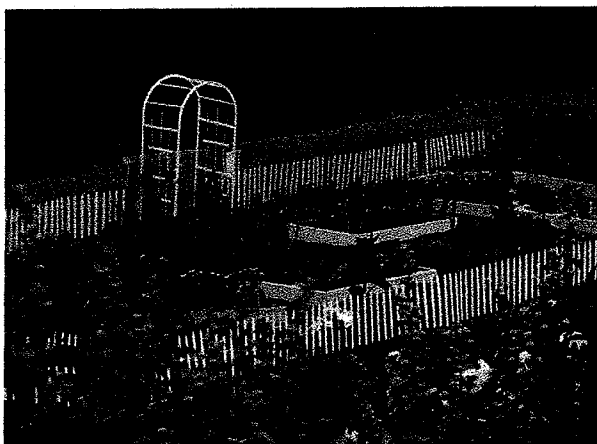
Due to the popularity of gardening, a square foot demonstration garden was established to educate the community and train volunteers on vegetable gardening at the Green Bay Botanical Gardens.

The square foot garden bed was established in partnership with the N.E.W. Master Gardener Volunteers at the Green Bay Botanical Garden to

promote and educate the public on growing local foods in a small space. The Brown County UW-Extension Horticulture Educator provided leadership and technical support to seven Master Gardener volunteers to establish this demonstration garden. At total of 177 volunteer hours were donated by N.E.W. Master Gardeners in 2010 for this project.

More than 1,000 people visited the square foot garden. Square foot garden educational displays were showcased at two public events at the Green Bay Botanical Garden to create

awareness on building square foot gardens. Two hundred copies of a square foot gardening brochure were distributed to the general public.



## Commercial Horticulture

There are a significant number of landscape businesses and nurseries in Brown County. This group of horticulture professionals has limited opportunities for professional development. The Brown County UW-Extension Horticulture Educator provides education to help this audience increase their knowledge on various sustainable landscape practices through newsletters, educational events and individual consultation services..

A bimonthly commercial horticulture newsletter (5 editions) was produced by the educator and distributed electronically to 220 horticulture professionals. The electronic version is also forwarded by the Wisconsin Green Industry Federations, Northeast Wisconsin Urban Forestry Network and UW Agriculture Extension Agents, reaching approximately an additional 2,500 individuals in Wisconsin.

Sixty-six horticulture professionals were trained on various landscape practices

during the four-week Landscaping and Grounds Maintenance Short Course program. Speakers are brought in from UW-Madison as well as the private sector.

Approximately 92 horticulture professionals learned about emerald ash borer (EAB) identification, biology and management options through the "EAB Management Strategies for the Green Industry" workshop organized by the educator and other Extension agents in Northeast Wisconsin.

Eight commercial landscapers and lawn service providers have changed their landscape practices as a result of onsite diagnostic consultation service provided by the educator.

Presentations on tree plantings and growing apples in Wisconsin were offered to the Fox Valley Landscape Contractors and NWTC landscape students respectively.

## Cottonwood Tree Research Project

Cottonwood trees are normally not thought of as a high-quality landscape tree. Female trees distribute large amounts of "cotton". In addition, leaf and trunk diseases as well as branch breakage are other issues related to the undesirability of these trees.

In 2004, the Brown County UW-Extension Office became involved with UW-Madison in a project to develop a new more favorable cultivar. This cultivar is fast growing (six to eight feet per year), is not weak wooded, easy to start from cuttings and grows into healthy, sturdy trees. The only challenge with this tree is space, as the tree at maturity is rather large and not every home owner in the county has space in their yard for a tree of this size.

In recent years, cuttings have been taken that were distributed to Brown County residents as well as municipalities looking for fast growing trees. Brown County

residents have had the opportunity to participate in an applied research project. As part of their involvement in the Project, they are asked to collect data regarding the tree(s) they plant.

In 2010, just over 300 cuttings were distributed with 50 going to the Green Bay City Forester. Approximately a quarter of individuals who received cuttings in 2010 had previously received cuttings.

A couple of tree plantations are located at the Brown County UW-Extension Office. The unique weather conditions in 2010 provided an excellent opportunity to see how the trees would do with significant rainfall. The rains of 2010 kept the western third of one plantation under three to six inches of water all summer. The young trees seem to cope fine with the excessive moisture.

## An Arboretum Grows in Bellevue....

This spring the Master Gardener Board made it official: The Brown County Extension grounds are now the **Brown County UW Extension Arboretum**, a place for science, education and peaceful reflection on the beautiful variety of nature. What a valuable and enriching gift to the community. The following is part of the letter that was sent to the Board a few months ago:

Since 1982 NEW Master Gardeners have been teaching horticultural principles to the residents of our region.

NEW Master Gardeners planned, planted, and cared for the grounds at 1150 Bellevue Street from 1982 until the present. The goal Master Gardeners set for the grounds early in its history was to demonstrate the best plants for clay soils with an emphasis on trees and shrubs. A perennial garden and fruit and vegetable plots were added later to demonstrate methods to grow herbaceous and food crops on modified soils. The grounds are a place for the education of youth and adults in plant identification and selecting varieties that thrive best on "heavy" soils. Master Gardeners have supported the grounds as a Horticulture Educational effort since its inception. The Master Gardener board remains the supervising body along with its grounds committee.

## Poverty Simulations

The United States remains in an economic crisis. Most experts predict a slow recovery with high levels of unemployment for the next several years. Many individuals and families are suffering from social and economic consequences due to the recession including those living in Brown County.

Annual household incomes in Green Bay fell 6.2 percent from 2008 to 2009, approaching a level not seen since 2005. (Source: *Green Bay Press-Gazette*, September 20, 2010). This rate of fall was faster than both the state and national averages.

Unemployment rates continue to rise. Brown County's unemployment rate as of June 2010 ranked 37<sup>th</sup> among Wisconsin's counties. The good news is that the unemployment rate for the county decreased from 8.4 percent in June 2009 to 7.3 percent in 2010. The City of Green Bay ranked ninth among Wisconsin cities

in 2010 with an unemployment rate of 10.6 percent. In 2009, the unemployment rate for the same period of time was 12.5 percent. (Source: *Wisconsin Department of Workforce Development Labor Market Information*).

In 2008, in the United States, 19 percent of all children aged birth to 17 (or nearly one in five) lived in poverty in the United States – the highest rate since 1998. In Brown County in 2009, 16 percent of children age 18 lived in poverty. (Source: *2009 American Community Source*).

To address the issue of creating an awareness of poverty in Brown County, the Brown County UW-Extension Family Living Educator and Brown County UW-Extension Nutrition Program Coordinator have conducted poverty simulations for a number of years.

A poverty simulation is designed to educate people about the realities of life

with a shortage of money and an abundance of stress. During the simulation, participants, role-play the lives of low-income families, from single parents trying to care for their children to senior citizens trying to maintain their self sufficiency on Social Security. The task of each family is to provide food, shelter and other basic necessities during the simulation while interacting with various community resources.

In 2010, eight poverty simulations were conducted. Four simulations were held for staff employed by the Ashwaubenon School District. Other simulations were conducted for Wisconsin Public Service Corporation, Quad Parishes, St. John The Evangelist Congregation and Seeds of Hope (a local initiative creating awareness about poverty in Brown County). A total of 403 individuals participated in the simulations. This number does not include individuals volunteering to run agencies during the simulation.

### Poverty Simulation Participant Evaluation n = 368 2010 Results

#### 1. My understanding of the financial pressures faced by low income families in meeting basic needs:

|                       | No understanding | Little | Moderate | Quite a bit | Almost Complete |
|-----------------------|------------------|--------|----------|-------------|-----------------|
| Before the simulation | 4                | 94     | 149      | 97          | 24              |
| After the simulation  | 1                | 0      | 30       | 243         | 94              |

#### 2. My understanding of the difficult choices people with low resources need to make each month when stretching limited income:

|                       | No understanding | Little | Moderate | Quite a bit | Almost Complete |
|-----------------------|------------------|--------|----------|-------------|-----------------|
| Before the simulation | 14               | 122    | 150      | 58          | 22              |
| After the simulation  | 0                | 3      | 29       | 238         | 98              |

#### 3. My understanding of the role of "resources" in helping people move out of poverty:

|                       | No understanding | Little | Moderate | Quite a bit | Almost Complete |
|-----------------------|------------------|--------|----------|-------------|-----------------|
| Before the simulation | 27               | 158    | 120      | 51          | 12              |
| After the simulation  | 2                | 15     | 110      | 185         | 54              |

#### 4. My understanding of the emotional stresses and frustrations created by having limited resources:

|                       | No understanding | Little | Moderate | Quite a bit | Almost Complete |
|-----------------------|------------------|--------|----------|-------------|-----------------|
| Before the simulation | 14               | 139    | 126      | 58          | 23              |
| After the simulation  | 0                | 6      | 29       | 210         | 122             |

## Invasive Species Overview: 2010

The main goal of the Brown County UW-Extension Invasive Species Program is to help maintain plant biodiversity. We do this through the control of invasive species. Invasive species are usually from other geographic regions and they are capable of growing and reproducing in natural areas, replacing native plants. By controlling invasives, we hope to favor native plants, allowing them to re-establish their diverse plant communities and the other organisms that depend on them.

Our program accomplished several objectives in the spring and summer of 2010. One of the more significant of these was the control of garlic mustard at 26 sites throughout Brown County. We now know of a total of 55 sites where garlic mustard is present and many of them are close to high-quality natural areas where the plant's spread is being effectively prevented. Several sites are very small – only a few square feet – where the plant is being “nipped in the bud.” This year, we also worked with alternative methods of control including cutting the garlic mustard in early flower, spraying the garlic mustard while bolting on low quality sites, using selective herbicides and establishing native grasses on lower quality sites. We also continued

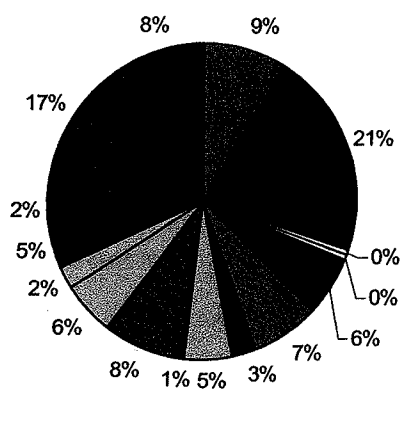
our involvement with a large herbicide trial through UW Madison in the Bay Beach Wildlife Sanctuary.

In 2010, we sprayed all the Phragmites that could be seen from the road in the townships of New Denmark, Glenmore, Morrison, Wrightstown, Ledgeview, Rockland, Lawrence, Eaton, Pittsfield and Holland, except for 1 or 2 clones per township that were too large to spray easily.

We also worked this year with the control of buckthorn. This was primarily done in the Baird Creek Parkway. The Invasive Species Program addressed one major insect threat. We put out 39 Japanese beetle traps to monitor their population in Green Bay. Unfortunately, the beetles are spreading into Bellevue, Suamico and beyond.

In 2010, we were also able to make better use of selective herbicides and do some more seeding of native plant species into the areas we manage for invasive plants. In addition, we continued to fence Canada yew plants that we find in Pulaski to protect them from deer. Canada yew is listed as a species of concern in Wisconsin.

Time Spent Controlling Invasive Species  
In Brown County Municipalities



**Invasive plants are non-native in origin and pose a great threat to our ecosystem.**

Some of the invasive plants in Brown County:



Buckthorn



Garlic Mustard



Honeysuckle



Phragmites

## Garlic Mustard

Garlic mustard is being seen as a larger problem in Brown County than it has in the past. This is partly because the plant is spreading, and partly because we are constantly finding more infestations. The problem has not, however, reached the severity here that it has in some other places in Wisconsin. Garlic mustard is probably the most important plant we work with in this program because it is a major threat to woodlands and at the same time it is found in a small enough area so that we can address it. Our goal in controlling this plant is to keep it from producing seed until we have exhausted the seed bank, while still protecting or re-establishing native vegetation.

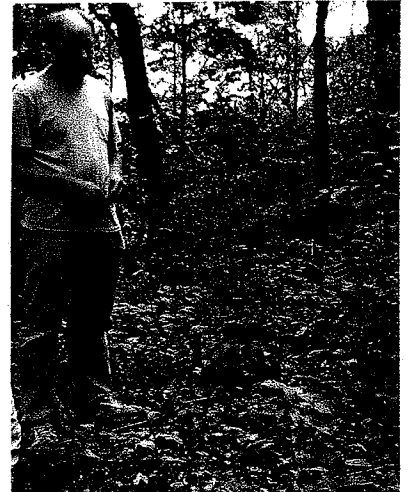
There are now more than 55 sites where garlic mustard has been found growing. The largest populations are at the Bay Beach Wildlife Sanctuary, Little Rapids in Lawrence, Lost Dauphin Park in Lawrence and Whistling Wind Road in De Pere. This year we controlled the garlic mustard in 26 sites, which means that almost all the sites worked on recently, were controlled this year as well. The number is down slightly from other years because most of the spring was too dry to spray.

Our most important method of control is to spray garlic mustard in the fall with glyphosate after the native vegetation has gone dormant, but the garlic mustard is still growing. To do this, we need air temperatures above 50 degrees F. It is preferable, where possible, to spray garlic mustard while it is still in the first year rosette stage. After that, it is harder to achieve control without damaging native vegetation.

When controlling garlic mustard, we treat the small sites first to keep them from getting any larger. Afterward, larger sites are addressed, and they are attacked from the edges to prevent spread.

Of the largest sites, Lost Dauphin Park in Lawrence is given highest priority because garlic mustard has been picked and sprayed there for the longest time in addition to the control of buckthorn and honeysuckle. One year of seed production would undo countless hours of spraying and pulling, and there is a good population of native plants there and getting better each year. This is the ninth year of nearly complete control of garlic mustard in Lost Dauphin Park and the plants are still coming up, but

considerably farther apart than before. We do have a concern in Lost Dauphin, that late in the season, the soil over almost the entire park is quite bare, with neither leaf litter nor actively growing plants. At some point, it may be necessary to establish native plants that will be actively growing in late summer and fall.



Brown County Invasive Species Team Coordinator Kevin Hendricksen at Lost Dauphin Park garlic mustard control plot

## Phragmites

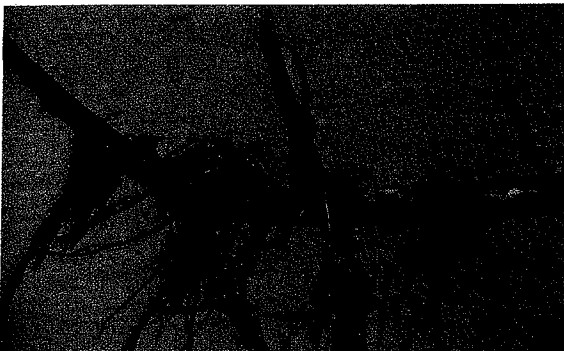
Phragmites is a grass native to all continents except Antarctica. There are forms of the grass that are native to Wisconsin which are not invasive. They co-exist with other native wetland species. There is another form of phragmites which has come in from Europe, which is profoundly invasive, taking over wetlands and completely out-

competing native plant species. Phragmites is an especially large problem in Brown County where there are many acres covered with it, especially along the Green Bay shoreline.

Our goal in this project is to limit the spread of phragmites and to control it within certain high value areas. There is far too much to hope to eradicate it. This summer we started spraying in the south of the county where there is relatively

little phragmites and worked our way north.

In 2010, we sprayed all the phragmites that could be seen from the road in the townships of New Denmark, Glenmore, Morrison, Wrightstown, Ledgeview, Rockland, Lawrence, Pittsfield, Eaton and Holland, except for 1 or 2 clones per township that were too large to spray easily. These same townships with few exceptions have been sprayed since 2005.



The main goal of the Brown County UW-Extension Invasive Species Program is to help maintain plant biodiversity.



## Organizational Change with the Food and Hunger Network

The Brown County Wisconsin Nutrition Education Program (WNEP) program has a history of working with the Brown County Food and Hunger Network to address the problem of food insecurity through emergency food programs. The organization was founded by food pantry volunteers who initially were unaware of the work other pantries were doing. Over a 10-year period, WNEP helped a loosely-organized task force grow into an effective, sustainable organization which is now self-maintaining.

Prior to WNEP's involvement in the network, the task force was comprised of only a few pantries and food-related agency staff who met on a monthly basis. Lacking the means of measuring the problem's scope – as well as the resources to address it – the network's agenda typically consisted of issues related to individual pantries and their difficulties in obtaining food to distribute.

Through education and organizing efforts, WNEP facilitated a pantry network meeting that brought together a wider range of pantry representatives and community members to share concerns and exchange information and ideas. This meeting jump-started the process of redefining the network's mission and goals. The network's members began to realize that their problems were not unique; other pantries were struggling with similar issues. They began questioning the threats and benefits of working together or remaining independent. This was the contemplation stage of organizational change.

WNEP continued to attend meetings and to introduce issues beyond emergency food to create an awareness and understanding of the broader problem of food insecurity. A strategic planning process was introduced. The network's expanding membership saw real value in coordinating efforts to create a stronger community voice for promoting food

security awareness and education. As a nonprofit, the network acted as the fiscal agent for several grants that focused on developing specific food security initiatives. This was the preparation stage of organizational change.

The WNEP Five-Year Household Food Security Survey – a study of food pantry users initiated in 1999, with follow up surveys conducted in 2004 and 2009 – provided critical information and community direction which ultimately improved food security among pantry users. As a result, the network adopted action steps to work together on common issues. Specifically, the network developed and expanded fundraising and food-purchasing partnerships; shared pantry usage statistics to monitor trends and more equitably distribute goods from food drives and food drops; provided outreach and education to clients about community resources and federal nutrition programs, including Food Share, free- and reduced-priced school food programs and Senior Farmers market vouchers; and promoted community awareness about food security efforts. Most recently, the network created internal structures and a planning process to increase its effectiveness as an organization.

The organization is now confident of its ability to plan and make decisions in the interest of all members. The organization's leadership has developed a real sense of the value that the organization adds to the community. The network has initiated and implemented activities that benefit the entire community by streamlining efforts to help low-income individuals achieve greater food security. As a result of the network's transformation and growth, WNEP's involvement has shifted from a continual presence to a role of providing assistance and information as requested, allowing us to move on to other important community work.

## Brown County 2009 Household Food Security Survey

Brown County UW-Extension began a food security initiative in 1995 in response to changes in welfare and family support programs. The United States Department of Agriculture (USDA) Community Food Security initiative also launched in 1995, used a holistic approach in addressing hunger needs nationally.

In 2009, Brown County UW-Extension conducted follow-up research to its 2004 and 1999 household food security studies that monitored the extent and degree of hunger and food insecurity in Brown County households using food pantries. Karen Early, Nutrition Education Program Coordinator has provided leadership to this effort. The studies have only been possible through the partnership with the University of Wisconsin-Green Bay Professional Social Work Program Brown County food pantries, individuals willing to serve on community advisor committees and various funders.

Food security is defined as access to enough food for an active, healthy life for all people. Food security involves four components related to food: availability, accessibility, quantity and nutritional adequacy and dependability of supply.

Summary of Research Findings  
(continued on Page 9)



## Lower Fox Basin TMDL Project

Continuing concerns related to the elevated levels of phosphorus and sediment loading in the Lower Fox River Basin from agriculture and commercial industry has been voiced in Brown County.

Due to these ongoing concerns, the Lower Fox River Basin Total Maximum Daily Load (TMDL) technical team mandated by the Environmental Protection Agency (EPA) with membership comprised of individuals from the Department of Natural Resources (DNR), sewage districts from affected areas and Land and Water Conservation Departments requested that a series of best management practices be investigated.

In response to the request, the Brown County UW-Extension Agriculture Educator researched and developed a document that addressed ten

agricultural best management practices to aide in controlling the levels of phosphorous and sediment loading. As a result of this ongoing project a presentation was developed and has been co-presented with Bill Hafs, Conservationist, Brown County Land and Water Conservation Department at the 2010 Clean River Clean Lake Conference and Fox Wolf Water Shed Alliance Storm Water Conference.

Forty-eight attendees representing agricultural producers, the Wisconsin Department of Natural Resources, the Environmental Protection Agency, the Wisconsin Department of Agriculture, Trade and Consumer Protection, multiple county land and water conservation departments, and multiple municipal waste treatment centers. Positive responses from participants about the presentation and speakers were received from attendees.

To assess the effectiveness of the presentations, an evaluation was distributed post-presentation. Responses were received from 48 participants. Respondents increased their knowledge from 2.70 to 4.05 on a Likert Scale (this reflects a 50% increase). The evaluation results and comments showed a positive response and proved this presentation to be of value to those attending.

Many of the participants stated that more information on the TMDL process is needed. A point made by one participant was as follows, "Would like more information/another presentation on agricultural best management practices and costs to better understand ag issues and possible options farmers have to control phosphorus."

## Grow Wisconsin Dairy Management Teams in Brown County

Class III milk prices dropped from \$19.32/cwt in January of 2008 to \$10.78/cwt in January of 2009 and maintained record lows for the remainder of the year. Milk prices also remained low during 2010. This has resulted in severe economic stress for dairy producers. This ongoing volatility has prompted several dairy producers in Brown County to implement management teams for their operations.

The Grow Wisconsin Dairy Team (GWDT) was launched in October of 2009. This program provides up to \$2,000 per farm to be used in the development of strategies to improve the operations of the farm in an effort to ensure future viability. Three Brown County dairy farms participated in this effort. A strategy utilized with all participants included a Strength,

Weakness, Opportunity, and Threat (SWOT) Analysis. The Brown County UW-Extension Agriculture Educator was involved as a facilitator for two farms and a liaison for the management team in the third. The management teams were comprised of owners, herd managers, veterinarians, nutritionists, agronomists, accountants, lenders, and Extension specialists to mention a few.

Interviews were conducted with the three producers/management teams participating (ranging in size from 50 head to 2,000 head) from Brown County. The following was indicated:

- 100% stated the management team had a positive impact on their operation and will continue with the process on a bi-yearly basis
- 100% stated the management

team improved communication between family members, consultants, and service providers

- 33% developed an organizational chart for managers and employees
- 33% made management changes (culled low producing cows, made strategic adjustments to rations, and made improvements in cow comfort in the close-up area)

Management changes implemented in one participating herd are as follows:

- Increased milk production from 49 pounds to 55 pounds/head/day
- Decreased feed costs of \$1.23/head/day
- The financial impact realized from increased production and decreased feed costs was approximately \$17,000 per month

## Brown County Geospatial 911 Community Service Learning Project

According to the Department of Labor's Employment and Training Administration, who recently released the Geospatial Technology Competency Model, "80% of careers by the year 2012 will require some knowledge of geospatial technology and systems." This is because the technology's uses are so widespread and diverse, that the geospatial market is growing at an annual rate of almost 35 percent, with the commercial subsection of this market expanding at the rate of 100 percent each year. Nationwide, an important use of geospatial data is by 911 dispatchers and first responders. According to the GIS Coordinator for the Brown County Land Information Office, "while all of the county parks are in the common places layer of the county GIS map, multiple entrances to the park and features within the park are not." This means that first responders may not be receiving the most direct route to a person in need from the 911 dispatchers, which could make the difference between life and death.

Brown County 4-H Youth Development Educator, Judy Wolniakowski, provided leadership for developing and delivering an innovative geospatial community service learning project. A network of geospatial professionals was established and included the Senior GIS Manager and the Survey Manager from Mi-Tech Services, Inc., Seiler Instruments, ESRI-Minneapolis, and the Brown County Land Information, Parks Management, and Public Safety Communications (911) Departments. These professionals led the project, provided state-of-the-art technologies valued at almost \$80,000 for youth to use, and provided an opportunity for youth to demonstrate their geospatial competencies by completing a real-world project.

Twelve youth participated in eight 4-H Geospatial project meetings held in February and March, 2010. During the first three meetings, youth learned about maps, how maps are used, and how to use GIS software to create a map or to view various layers of a map. Since navigation is an important aspect of geospatial studies, 4-H members learned how to use a compass and demonstrate their orienteering skills. Youth then learned about GPS, how it is used, and how it integrates with GIS. 4-H youth also learned about historical methods for surveying and mapping, career opportunities, teamwork, computer technology, and community service learning.

At the conclusion of the project, youth completed a knowledge based survey. Results show that 100% understand how map scale can be represented, and 83% know what elements should be on every map, what map scale is, what "heading" means, and what satellites are used for. Working in teams, youth demonstrated their skills by acquiring waypoints for various features at Green Isle Park, including the tennis court, basketball court, playground, baseball fields, and entrances using professional Trimble GPS units and professional GIS software. They downloaded the waypoints into a computer and used them to create a map using GIS software. The data these 4-H youth collected was provided to Brown County where it was downloaded into the 911 database and included in the Brown County GIS web map. The GIS Coordinator for the Brown County Land Information Office, the Director for the Public Safety Communications Department, and the Assistant Park Director have all expressed a need to have similar data for other trails and have asked 4-H to take a lead in acquiring the data.

### Summary of Research Findings (continued from Page 7)

- 713 pantry users were surveyed at 17 different pantries in the Green Bay area
- Twice as many women as men visited pantries.
- In households with children, 50 percent had children between the ages of five years of age and 17 and 30 percent had children under age five.
- Of pantry users surveyed, 58 percent were White, 20 percent were Hispanic, and 20 percent represented the total of other ethnic groups.
- Between 1999 and 2004 there was a drop in food insecure households, 82 percent in 1999 versus 71 percent in 2004. In 2009, there was an increase of food insecure individuals compared to 2004, 89 percent versus 71 percent, which is an 18 percent increase in food insecurity since 2004.
- Households with children experienced an 82 percent rate of low or very low food security. That means households reported reduced quality, variety and some reported multiple indications of disrupted eating patterns and reduced food intake.
- The three most often cited strategies in 2009 to having enough money for food were: 49 percent borrowing from friends; 37 percent neglecting health care needs; and 35 percent not paying rent on time. There was a difference in 2004 with 31 percent not paying rent on time, 29 percent neglecting health care needs and 24 percent getting another job.

## Got Dirt? Garden Initiative

Obesity is a growing problem in our society with one in three Wisconsin children either overweight or obese. If this trend is not reversed, it will create an additional burden on our health care system.

The Centers for Disease Control identifies gardening as a "promising" strategy for increasing fruit and vegetable consumption, thus reducing obesity. The Got Dirt? Garden Initiative was developed as a statewide effort

involving numerous UW-Extension professionals, Wisconsin Master Gardener volunteers, Wisconsin Department of Health Services, the UW School of Medicine and Public Health, and other interested individuals. The primary purpose of this program is to train teachers and childcare providers so they have the knowledge and confidence to start gardens at their facilities.

Through the efforts of the multiple trainers, 672 people attended training classes throughout Wisconsin and started 107 new gardens. Over 3,400 children were involved in planting and caring for these gardens. In addition, 82.5% of the respondents used the gardens for academic instruction. Additional evaluation results will be available early in 2011. For an update or to learn more about the program visit [www.gotdirtwisconsin.org](http://www.gotdirtwisconsin.org).



## The Weekend Gardener

In the last few years, an increasing number of people were expressing interest in vegetable gardening. This demand has been created by many factors including the economy as well as a desire to know how and where their food is produced.

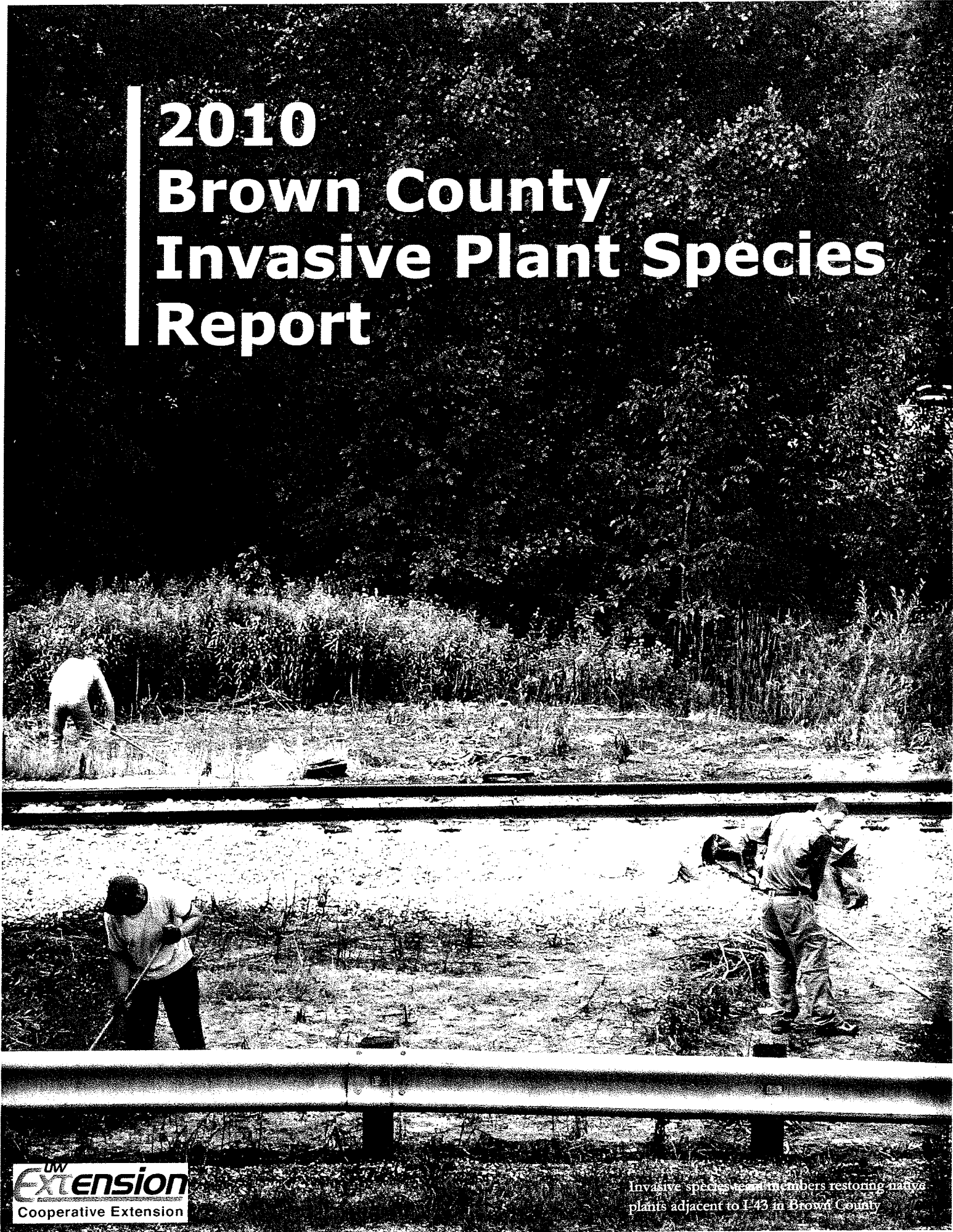
Brown County UW-Extension has strived to meet this need through community gardens, the Organic Learning Center, as well as numerous classes throughout the winter and spring. In order to expand our reach, we partnered with NBC26 to create a weekly gardening segment called The Weekend Gardener. The segment aired at 5:00 p.m. and 6:00 p.m. each Friday during the summer months and began with weather from the garden by Chief Meteorologist Cameron Moreland followed by a discussion of some aspect of organic vegetable gardening using the raised bed garden adjacent to the studio.

Unless severe weather was forecast, the segments were live each week. A total of 30 segments were created with Master Gardener Volunteer Mark Sprague

filling in for two of the segments. Results indicated that there were over 300,000 "views" of these segments.



# 2010 Brown County Invasive Plant Species Report



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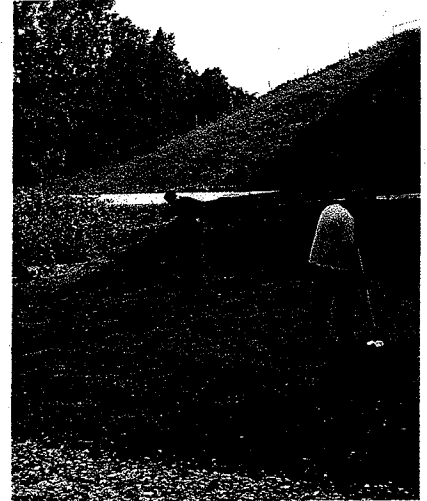


# Invasive Plant Species Overview: 2010

By Kevin Hendricksen, Brown County Invasive Species Team Coordinator and Chris Hoffman, Brown County Invasive Species Assistant

The main goal of the Brown County UW-Extension Invasive Plant Species Program is to help maintain plant biodiversity. We do this through the control of invasive plant species. Invasive species are usually from other geographic regions and they are capable of growing and reproducing in natural areas, replacing native plants. By controlling invasives, we hope to favor native plants, allowing them to re-establish their diverse plant communities and the other organisms that depend on them.

Our program accomplished several objectives in the spring and summer of 2010. One of the more significant of these was the control of garlic mustard at 26 sites throughout Brown County. We currently know of 55 sites where garlic mustard is present and many of them are close to high-quality natural areas where their spread is being effectively prevented. Several sites are very small – only a few square feet – where the garlic mustard is being “nipped in the bud.” This year, we also worked with alternative methods of control including cutting the garlic mustard in early flower, spraying the garlic mustard while bolting on low quality sites, using selective herbicides and establishing native grasses on lower quality sites. We also continued our involvement with a large herbicide trial through UW Madison in the Bay Beach Wildlife Sanctuary.



In 2010, we sprayed all the Phragmites that could be seen from the road in the townships of New Denmark, Glenmore, Morrison, Wrightstown, Ledgeview, Rockland, Lawrence, Eaton, Pittsfield and Holland, except for one or two clones per township that were too large to easily spray. We also worked this year with the control of common and glossy buckthorn, primarily in the Baird Creek Parkway. We were able to make better use of selective herbicides and do some more seeding of native plant species into the areas we manage for invasive plants. In addition, we continued to fence Canada yew plants that we find in Pulaski to protect them from deer. Canada yew is listed as a species of concern in Wisconsin.

The Invasive Species Program addressed one major insect threat in 2010. We put out 39 Japanese beetle traps to monitor their population in Green Bay. Unfortunately, the beetles are spreading into Bellevue, Suamico, and beyond.

## Japanese Knotweed - *Polygonum cuspidatum*



Japanese knotweed leaves and flowers

In the fall of 2007, Heather Gentry, with funds from WI DNR, sprayed three clones of Japanese knotweed using glyphosate. The patches were knocked back considerably but not eliminated. In the fall of 2008 and summer of 2009 these clones were sprayed again. This plant is behaving much like phragmites. Glyphosate suppresses the clones but does not eliminate them completely. Another herbicide should be tried.

Only one of three clones was sprayed in 2010, since one was included into a lawn and another was included in a walking trail.



## Garlic Mustard - *Alliaria petiolata*

Garlic mustard is being seen as a larger problem in Brown County than it has in the past because it is spreading, resulting in more infestations being found. The problem has not, however, reached the severity here that is has in some other places in Wisconsin. Garlic mustard is probably the most important plant we work with in this program because it is a major threat to woodlands. At the same time, it is found in small enough areas so that we can address it. Our goal in controlling this plant is to keep it from producing seed until we have exhausted the seed bank, while still protecting or re-establishing native vegetation.

There are now more than 55 sites where we have found garlic mustard. The largest populations are at the Bay Beach Wildlife Sanctuary in Green Bay, Little Rapids and Lost Dauphin Park in Lawrence, and Whistling Wind Road in De Pere. This year we controlled the garlic mustard in 26 sites, which means that almost all the sites we have worked on in the recent past were controlled this year as well. The number is down slightly from other years because most of the spring was too dry to spray.

Our most important method of control is to spray garlic mustard in the fall with glyphosate after the native vegetation has gone dormant, but the garlic mustard is still growing. To do this, we need air temperatures above 50 degrees F. It is preferable, where possible, to spray garlic mustard while it is still in the first year rosette stage. After that, it is harder to achieve control without damaging native vegetation.

When controlling garlic mustard, we treat the small sites first to keep them from getting any larger. Afterward, larger sites are addressed, and they are attacked from the edges to prevent spread.

Of the largest sites, Lost Dauphin Park in Lawrence is given highest priority because garlic mustard has been picked and sprayed there for the longest time in addition to the control of buckthorn and honeysuckle. One year of seed production would undo countless hours of spraying and pulling,

and there is a good population of native plants there and getting better each year. This is the ninth year of nearly complete control of garlic mustard in Lost Dauphin Park and the plants are still coming up, but considerably farther apart than before. We do have a concern in Lost Dauphin that late in the season the soil over almost the entire park is quite bare, with neither leaf litter nor actively-growing plants. At some point, it may be necessary to establish native plants that will be actively growing in late summer and fall.



Brown County Invasive Species Team Coordinator Kevin Hendricksen assessing garlic mustard control success at Lost Dauphin Park

In late May and June, garlic mustard missed by spraying is pulled by hand. Clearly, a fall spraying significantly reduces the amount that needs to be pulled. Pulling involves going to a site, hand removing all second-year plants and placing them in a garbage bag and bringing the bags to a landfill.

While trying to suppress garlic mustard, we must remember that no method is 100 percent effective. Herbicide applications are only partially successful. Additionally, after pulling garlic mustard, especially when it is still in flower, anything that was not pulled out by the roots will re-sprout and may set seed. For these reasons, monitoring our work is an essential aspect of the project.

We also tried cutting the garlic mustard at the soil level with a weed whip while it was in early flower. In order to be effective, the garlic mustard must be cut off at the soil surface, as low as possible. If any stem is left, the plants grow back.

We are trying to move toward using commercial applicators to control garlic mustard on larger sites. This fall we had Dave Doering from Canadeo Lawn Care spray the garlic mustard in the Baird Creek Parkway, and he will hopefully be able to spray Optimist Park in Allouez this spring. We will continue to use commercial applicators as funds allow. The Town of Lawrence has been spraying the garlic mustard in Lost Dauphin Park for the last few years. Our role in these cases is simply to pick the garlic mustard missed in these sites. As more cities and townships see the need to control their invasive species, we hope our program will be freed up to do other things like restore native plants on the sites where we have been controlling invasive species and to do more scouting to find new invasive species and prevent their spread. We are hoping that additional entities will be willing to pay to have commercial spraying done in the future, such as the City of Green Bay, Heritage Hill, the Bay Beach Wildlife Sanctuary and private landowners. Handling things in this way should allow us to cover more ground with more certainty and help avoid pulling so much garlic mustard in the spring (very labor intensive).

We have been fortunate that Mark Renz from UW-Madison and Brown County UW-Extension Horticulture Educator Vijai Pandian continued an herbicide trial in the Bay Beach Wildlife Sanctuary for the control of garlic mustard. The trial was established in the spring of 2007 and is being continued and refined.

The field trials being done by Vijai Pandian and Mark Renz are showing that spring spraying garlic mustard with glyphosate or Escort while the plants are bolting, is very effective. An advantage of

*Continued on page 5...*

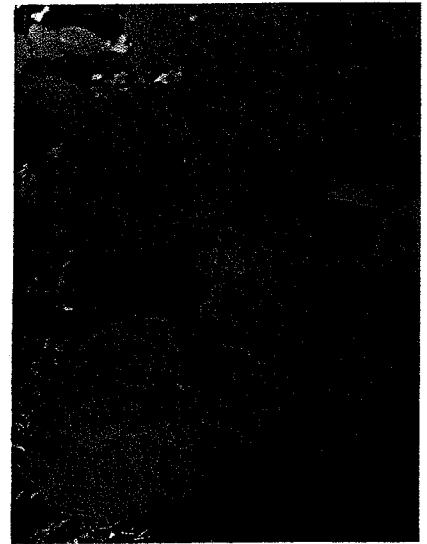
## Garlic Mustard (continued from page 4)

spring spraying is that rosettes and bolting plants are killed as well as seedlings, effectively doing two years of work at once. The problem is that native plants can be killed at the same time.

On sites where spring spraying is done, we want to be able to establish some plant cover in order to maintain native species, and to hold the soil against erosion. In 2010, we had success establishing native grass (Virginia wild rye) on a shady, degraded garlic mustard site in Wrightstown. We sprayed glyphosate (Roundup) in April when the garlic mustard plants were starting to bolt. We later planted 5 pounds of Virginia wild rye seed in an area of 8,000 square feet. To prepare the site (it was a steep hillside under boxelder and black locust shade), we

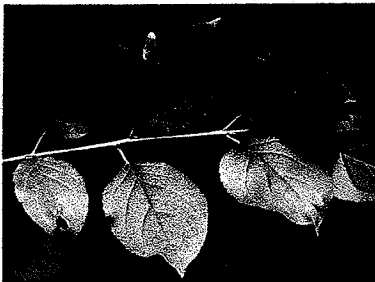
raked all the leaves and small sticks into contour barriers to help prevent erosion, broadcast the seed and later incorporated it with rakes.

The grass came in thickly, there didn't appear to be any erosion, and by the end of the season the Virginia wild rye was still low (about 5" tall), and none flowered, but was a very good stand. There were very few first year garlic mustard plants, but next spring we hope to spot spray the bolting garlic mustard plants with Escort (a broadleaf specific herbicide) and do so every spring until the garlic mustard is controlled. We hope to repeat this practice on other low-quality sites and find more species of native grass and sedges that will grow under the conditions we work with in Brown County.



Garlic mustard - first year rosette stage

## Common Buckthorn - *Rhamnus cathartica* Glossy Buckthorn - *Rhamnus frangula*



Common buckthorn  
*Rhamnus cathartica*



Glossy buckthorn  
*Rhamnus frangula*

The two species of buckthorn (common buckthorn and glossy buckthorn) are a big problem in Brown County, where they can invade high quality woodlands and out-compete native vegetation. They are widespread and their suppression in the county overall is out of reach of this program at its current size. In order to address the problem, it seems that individual landowners need to be educated on the reasons the plant needs to be suppressed and methods of suppression. This awareness could be part of our program.

In 2010 we concentrated on the buckthorn growing in the Baird Creek Parkway. We did a basal bark treatment along I-43 with Garlon 4 and diesel oil. This was very effective. We were not able to work as much with buckthorn this year as other years, because we were kept busy with other species such as phragmites, Japanese hedge parsley, crownvetch and doing several restorations.

Our normal practice is to cut the buckthorn with a chain saw and treat the cut stumps with 20% glyphosate. In a given buckthorn infested site, after the seed producing trees are removed, very often in subsequent years the area becomes covered with buckthorn seedlings. The prospect of having to cut all these seedlings is daunting. These seedlings can be sprayed with 2% glyphosate in October after most of the native plants are dormant. In Lost Dauphin Park, Green Isle Park and parts of the Baird Creek Parkway, this has been very effective and will be done again in the future time permitting.



## Phragmites - *Phragmites australis*

Phragmites is a grass native to all continents except Antarctica. There are forms of the grass that are native to Wisconsin which are not invasive. They co-exist with other native wetland species. There is another genotype of phragmites which has come in from Europe which is profoundly invasive, taking over wetlands and completely out-competing native plant species. Phragmites is an especially large problem in Brown County where there are many acres covered with it, especially along the Green Bay shoreline.

Our goal in this project is to limit the spread of phragmites and to control it within certain high value areas. There is far too much to hope to eradicate it. This summer we started spraying in the south of the county where there is relatively little phragmites and worked our way north.

In 2010, we sprayed all the phragmites that could be seen from the road in the townships of New Denmark, Glenmore, Morrison, Wrightstown, Ledgeview, Rockland, Lawrence, Pittsfield, Eaton and Holland, except for one or two clones per township that were too large to spray easily. These same townships with few exceptions have been sprayed since 2005.

Our program has been using glyphosate at 2% concentration. The spraying has been done in late July and August. We have had to do small spot spraying the year after initial spraying, but this has not been too difficult. So far, native species have begun to grow back in some clones. The predominant species are jewelweed, cattails that are missed in spraying, blue vervain, and swamp milkweed. Very few sedges have been observed. Invasives are also coming in, including reed canary grass and Canada thistle.

Using 2% glyphosate has been setting clones back by 95% or so. Glyphosate has not, however, been 100% effective at killing phragmites. We have had to re-spray the same clones year after year.

In previous years, we treated some phragmites clones by tying the canes into bundles, cutting them, and treating the cut surface with 20% glyphosate. This is time consuming but may be necessary where phragmites is growing along with native plants.

In 2011 all the phragmites clones that have been sprayed in the past will be monitored and any re-growth of phragmites will be sprayed.

We have not tried to plant native plants in the phragmites clones we have sprayed because the phragmites leaves a very thick mulch of old canes on the soil surface, impeding soil-seed contact and re-spraying the phragmites is likely to kill native seedlings. Planting may be feasible, but it has not seemed very likely to succeed.

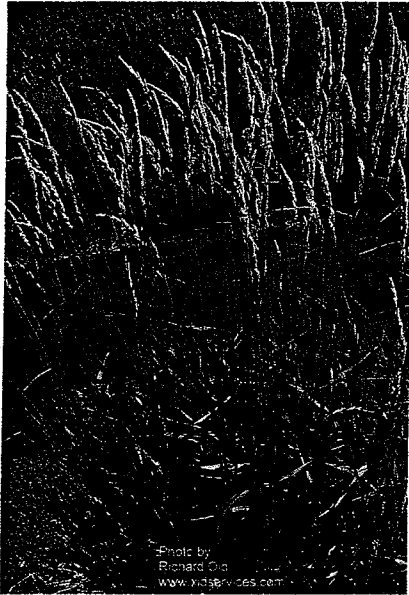


Underground rhizome of phragmites. Nearly 80% of phragmites biomass is below ground.



Spraying phragmites near Bellevue Street and Allouez Ave.

## Reed Canary Grass - *Phalaris arundinacea*



This plant probably poses as great a threat as any invasive in Brown County. *Phalaris* sp. spreads both by seed and rhizomes, is adapted to a wide range of conditions, mostly in wetlands, but grows on well-drained soil as well. It is extremely competitive with native plants and is still being planted by some people on low ground for forage and along highways to stabilize the soil.

This plant is very prevalent, almost ubiquitous, and there are no easy selective controls. Therefore, this program has not worked very much with it aside from spraying the plants on the property behind the Agriculture & Extension Service Center.

Knowing the threat it poses to plant biodiversity, our program eventually needs to address the control of reed canary grass. Control methods might involve a hand-held wick applicator containing glyphosate, or selective herbicides which might control *Phalaris* without killing sedges or broadleaf plants.

Other sources suggest using one or more of the following: spraying with glyphosate very early in the spring while the cool season *Phalaris* is growing and the warmer season natives are still dormant; cutting the *Phalaris* at flowering to avoid seed production; and cutting *Phalaris* in mid-September and spraying re-sprouts in October, when the *Phalaris* is growing well in the cool weather and the natives have been knocked back by the cutting and frosts.

Since 2007 we have been cutting areas of reed canary grass behind the Agriculture & Extension Service Center and in October or November spraying it with 2% glyphosate, after the reed canary grass had re-grown. Native seeds have then been repeatedly broadcast over the area. Some species are swamp milkweed, great St. Johnswort, bergamot, meadow rue, New England Aster, Joe Pye-weed, boneset, a mixture of sedges, culver's root, blue vervain, and obedient plant. So far, this seems to have been successful. The reed canary grass is not eliminated but is decreasing while native species are increasing.

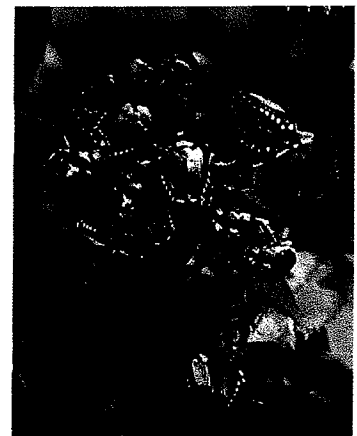
There have been some weed problems in the area; including narrow leaved cattails, phragmites, sow thistle, and the worst has been *Hordeum jubatum* or squirrel tail grass. Spraying Poast herbicide before flowering has tended to keep the squirrel tail grass under some control and also seems to slow the growth of reed canary grass and has little effect on the broadleaf plants nor the sedges.

## Japanese Beetles - *Popillia japonica*

In 2010 we continued to monitor Japanese beetle populations. On July 13th, 39 traps were placed in Brown County (Green Bay, Pulaski, Howard, Hobart, Wrightstown, Suamico, Bellevue, Allouez and Ledgeview).

Traps were recovered on August 18th. Ten were either damaged or missing and two traps lost their pheromone piece.

The sites with the highest amount of beetles were Idlewood Park in Suamico (1,500) and Village Green Golf Course in Howard (250). A total of 3,161 Japanese beetles were collected in Brown County. The population is comparatively lower than in 2008 and 2009.

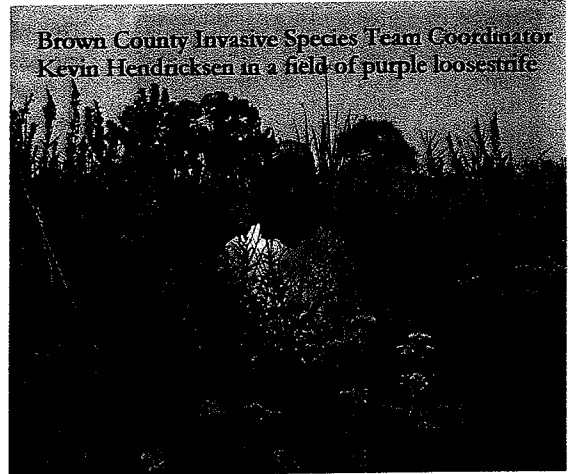


## Purple Loosestrife - *Lythrum salicaria*

Purple loosestrife has been a large problem in Brown County, especially in the areas closest to the Fox River, Duck Creek and the East River. In the past, the attack strategy included spraying outlying areas and releasing beetles in the core, more dense areas. The releasing of *Galerucella* beetles as a bio-control has proven very effective as well as economical and a better long-term solution. Spraying chemicals, on the other hand, is expensive, time consuming, doesn't result in 100% kill and tends to eliminate species that could provide some competition for purple loosestrife. For these reasons, the release of beetles has been emphasized over chemical control.

In 2010 we did not release any beetles for bio-control of purple loosestrife. The beetles have been widely distributed in Brown County through our program and others, and purple loosestrife, while still very visible, does not seem to be out competing native vegetation anymore and our time seemed better spent working with garlic mustard.

Brown County Invasive Species Team Coordinator Kevin Hendricksen in a field of purple loosestrife



## Perennial Pepperweed - *Lepidium latifolium*



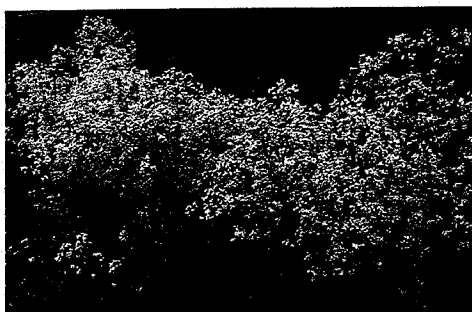
Perennial pepperweed fleshy taproot

In 2010 we also continued to work with perennial pepperweed which is a rhizomatous member of the mustard family from Europe. This plant invades sunny areas such as pastures, roadsides and prairies.

This plant was first found in Wisconsin in 2007 by Mark Renz from UW-Madison while he was monitoring the garlic mustard herbicide trials in the Bay Beach Wildlife Sanctuary. Specimens were sent to the herbaria at UWGB and UW-Madison.

Our goal is to eradicate the plant, so in 2007 we tied, cut and treated all the flower stalks with 20% glyphosate and sponged the same herbicide onto all the young plants we found. In fall 2007, all the rosettes that could be found were sprayed with glyphosate. In the early spring 2008, rosettes were sprayed again with glyphosate and in July the flowers were cut off and any plants that bloomed and the rosettes were sprayed with 2,4-D as recommended by Mark Renz.

Kelly Kearns from WI DNR in Madison gave us funds to buy Escort, which will be used in the future since it is broadleaf specific and has some pre-emergent properties. We will monitor the site frequently and spray any new plants as they appear.



Perennial pepperweed in bloom

The main goal of the Brown County  
UW-Extension Invasive Plant Species  
Program is to help maintain  
plant biodiversity.

## Crownvetch - *Coronilla varia*



Crownvetch is an herbaceous, leguminous plant used along roadways to control erosion. Crownvetch has also proven to be highly invasive, growing in full sun to light shade. It has become a problem in old fields and prairie and savanna areas.

In the past, we have tried 2,4-D and Roundup to control crownvetch, but neither were very effective. In the summer of 2009, we sprayed a small area in the Baird Creek Parkway with Escort (metsulfuron methyl) which is a broadleaf specific herbicide. This was effective and in summer of 2010, this section was planted to Indian grass, the seeds of which were harvested just a few yards away. In October, the Indian grass was small but well established, some flowered and produced seed. The planting was very successful. In October, many crownvetch plants had also grown from seed, but they should be easy to control with a spring spraying of Escort.

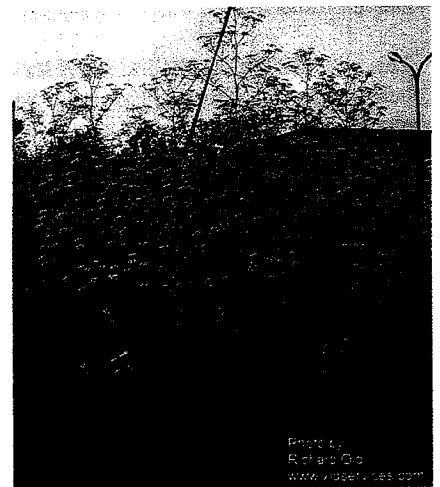
We also used Escort to spray a swath of crownvetch in Baird Creek from Superior Road to McKenzie Lane to stop the spread of crownvetch from I-43 into the parkway. We hope to spray more every year, plant native seed, and eventually eliminate crownvetch from this site.

In 2010, we had success in controlling crownvetch by using Transline (clopyralid). This herbicide is even more selective than Escort, mostly killing legumes and composites (members of the bean and sunflower family). We plan on using Transline over a relatively large area in the Baird Creek Parkway in spring 2011 and plant prairie seeds in the fall. Transline was also used this year to spot spray crownvetch growing in a newly established prairie planting around a retention pond near McKenzie Lane in Green Bay.

## Poison Hemlock - *Conium maculatum*

Poison hemlock is a biennial (winter annual?) broadleaf plant which is invasive and toxic to human beings. Poison hemlock does not seem to grow many places in Brown County, but Dr. Matt Dornbush from UWGB has observed the plant becoming very invasive in Indiana and was concerned that it might invade other places in the Baird Creek Parkway where it is presently found. For these reasons, we have decided to work with this plant.

Many non-native plants remain green late in the fall, so in 2008 I was hoping to be able to spray poison hemlock in September. I was surprised to find all the poison hemlock dormant at this time. I returned on October 31 and found the poison hemlock green and growing again, so I sprayed it with 2% glyphosate. The spraying seemed to be effective because no rosettes (which would have flowered in 2009) came up the next spring, but the ground was covered with seedlings. These seedlings were sprayed very early in the spring, once again with 2% glyphosate, and almost all were killed. 2,4-D was also used, but was much less effective. After spraying, no more poison hemlock seeds germinated except for a few later that fall. This early spring spraying of poison hemlock was done well before most of the native plants were actively growing, so the site now has a very healthy stand of common milkweed.



In the early spring of 2010, I sprayed all the poison hemlock seedlings and planted a land restoration prairie mix from Prairie Nursery. We were fortunate to have a very rainy summer and the seeds grew well. Many poison hemlock plants also grew as rosettes, but the prairie plants were able to maintain a good stand. In the very early spring of 2011, our plan is to spray the poison hemlock rosettes and seedlings with Roundup before the native prairie plants green up. Crownvetch is also growing in this restoration so it will have to be spot sprayed with Transline (clopyralid) throughout the season.

## Japanese Hedge Parsley - *Torilis japonica*

In the fall of 2008, Japanese hedge parsley was found growing on private land adjacent to the Baird Creek Parkway. This plant is an invasive herb from Asia which can dominate areas in shade or full sun. So far here in Green Bay, it seems that Japanese hedge parsley prefers light shade.

This is one of the few times that Japanese hedge parsley has been found in this part of the state. It does not yet seem to be widely distributed in Brown County, although there are several acres of it growing on private land adjacent to the Baird Creek Parkway, with a few small patches growing inside the parkway. We are hopeful to be able to prevent its further spread into the parkway itself.

In 2009, we attempted to control Japanese hedge parsley in three ways: cutting with a walk-behind brush cutter, spraying with

Escort herbicide and spraying with 2,4-D. All three treatments were done on July 9<sup>th</sup>, when the plants were in early bloom.

Cutting in early bloom has proven to be effective, with almost no plants re-flowering as long as they are cut below the first branch. Certainly, everything cut below 6 inches has died. This was the case in 2010 as well. Cutting has the advantage of not killing most of the existing vegetation which would provide competition for the Japanese hedge parsley and some sites could be cut quickly and easily with large machinery.

We attempted control with 2,4-D and Escort because they are broadleaf specific herbicides and potentially the hedge parsley sites could be planted to native grasses and still sprayed for hedge parsley. Escort has killed the plants and seems to have

prevented seed formation. Escort also killed rosettes and did not kill the grasses on the site. 2,4-D did not kill rosettes, only stunted the flowering plants and they still set seed.

Japanese hedge parsley is a concern for the Baird Creek Parkway because it grows well in savannas and edge habitats (hence its common name "hedge" parsley) and there are plans to manage part of the parkway as savanna, which could favor the spread of this species. In addition, the seed of this species is a sort of small bur which adheres to clothing and fur, so its spread could be rapid.

In the spring, we hope to spray some Japanese hedge parsley with glyphosate before native plants are growing to avoid killing plants that might compete successfully.

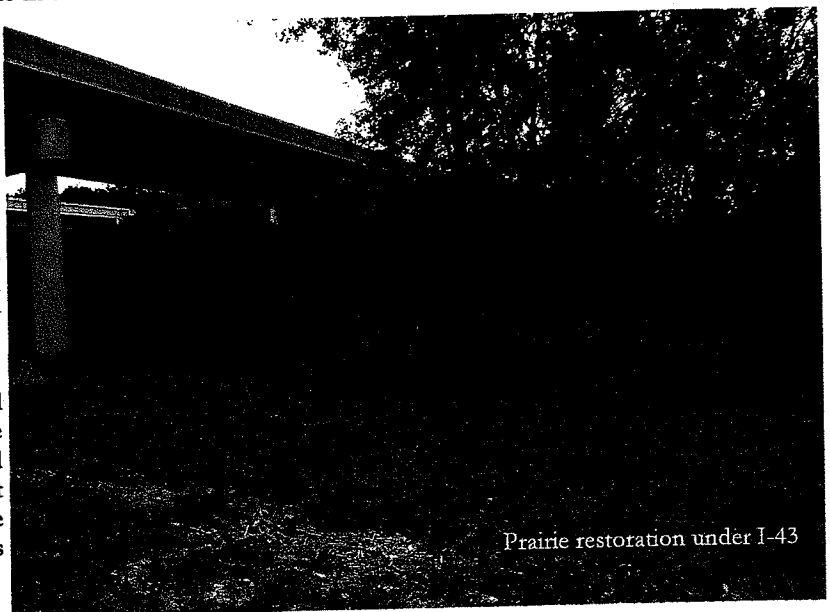
## Restorations

Many of the sites we work on in this program have relatively few native species. Since our main goal is the preservation of biodiversity, it makes sense for us to try to restore some of the native species. Additionally, it seems that a highly diverse site with a large number of native species is a good defense against future invasion by exotic species.

This year, we did restoration activities on several sites, mentioned in other sections of this report. To summarize, we continued to work behind the Agriculture & Extension Service Center on a wetland area, doing both maintenance and new plantings. We planted a prairie mix in an area infested with poison hemlock, Indian grass in a site with crownvetch, and Virginia wild rye on a garlic mustard site. In addition, we assisted with a study of plant species in the Baird Creek Parkway on a site that will hopefully be managed as oak savanna in the future, to get base line data and to track changes in species composition over time.

We were also involved in getting a mowing ban established for a prairie remnant in the City of Green Bay. The city had begun to mow the area frequently to include it into a turf grass planting. In time, any prairie plants would be eliminated. So we called the city and they put up signage and stopped mowing.

All these small restoration projects have been successful so far and it is a great pleasure to take the project past the point of just "killing things." We hope to expand restoration activities into other sites in which we work. It is also good to remember that in some of the sites we work in, restoration is not as necessary because there is already a population of native plants growing.



Prairie restoration under I-43

# Herbicide Effectiveness on Invasive Weeds in CRP Fields in Wisconsin

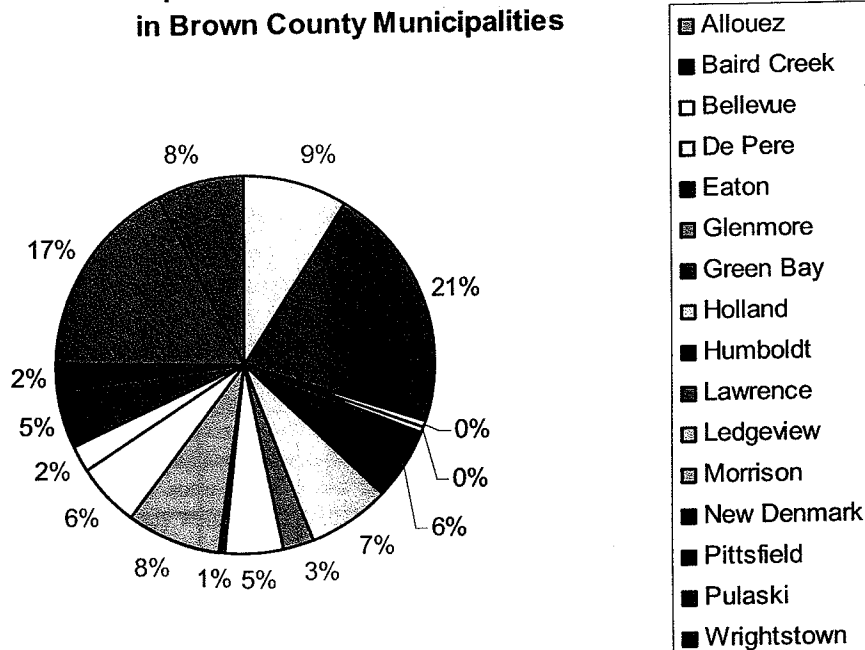
Source: Mark Renz, assistant professor of agronomy, UW-Extension. Originally published in Extension publication Pest Management in Wisconsin Field Crops-2009 (A3646)

| Commercial Name                  | Common Name (active ingredient)     | Clover, white & yellow | Crown vetch | Garlic mustard | Japanese hedge parsley | Japanese knotweed | Phragmites | Teasel, cutleaf & common | Thistle, Canada | Wild parsnip |
|----------------------------------|-------------------------------------|------------------------|-------------|----------------|------------------------|-------------------|------------|--------------------------|-----------------|--------------|
| Banvel                           | dicamba                             | G/E                    | -           | F              | -                      | F/G               | N          | G/E                      | F               | F            |
| Cimarron Max                     | metsulfuron + 2,4-D + dicamba       | G/E                    | G/E         | -              | -                      | -                 | N          | G/E                      | F/G             | -            |
| Cimarron Plus                    | metsulfuron + chlorsulfuron         | G                      | G           | -              | -                      | -                 | -          | F/G                      | G               | -            |
| Crossbow                         | 2,4-D + triclopyr                   | G/E                    | -           | -              | -                      | -                 | N          | G                        | F               | G            |
| Curtail                          | 2,4-D + clopyralid                  | -                      | -           | -              | -                      | -                 | N          | G/E                      | G               | G            |
| Escort/Ally                      | metsulfuron                         | G/E                    | G           | G/E            | -                      | -                 | N          | F/G                      | F/G             | E            |
| Forefront                        | 2,4-D + aminopyralid                | G/E                    | G/E         | -              | -                      | -                 | N          | G/E                      | G/E             | G            |
| Fusilade                         | fluazifop                           | N                      | N           | N              | N                      | N                 | F/G        | N                        | N               | N            |
| Garlon                           | triclopyr                           | E                      | G/E         | G              | G                      | F/G               | N          | -                        | F               | F            |
| Gramoxone                        | paraquat                            | P/F                    | P           | P/F            | P/F                    | P                 | P          | P                        | P               | P            |
| Grazon P+D*                      | 2,4-D + picloram                    | E                      | -           | -              | -                      | -                 | N          | E                        | G               | G            |
| Habitat <sup>NS</sup>            | imazapyr <sup>NS</sup>              | P/F                    | P           | G/E            | -                      | G/E               | G/E        | G/E                      | F               | -            |
| Journey <sup>NS</sup>            | imazapic + glyphosate <sup>NS</sup> | P/F                    | P           | G/E            | -                      | F                 | F          | G                        | P               | F            |
| Milestone                        | aminopyralid                        | G/E                    | G/E         | -              | -                      | -                 | N          | E                        | E               | F            |
| Oust <sup>NS</sup>               | sulfometuron <sup>NS</sup>          | G/E                    | G/E         | G/E            | -                      | -                 | -          | F                        | G               | -            |
| Outrider                         | sulfosulfuron                       | -                      | -           | G              | -                      | -                 | -          | N/P                      | -               | -            |
| Overdrive                        | dicamba + diflufenzopyr             | F                      | -           | F              | -                      | F                 | -          | G/E                      | G               | G/E          |
| Plateau                          | imazapic                            | N                      | N           | G/E            | -                      | P                 | P          | G                        | P               | P            |
| Poast                            | sethoxydim                          | N                      | N           | N              | N                      | N                 | P/N        | N                        | N               | N            |
| Pursuit                          | imazethapyr                         | N                      | N           | -              | -                      | -                 | -          | -                        | P               | -            |
| Redeem                           | clopyralid + triclopyr              | E                      | -           | -              | -                      | -                 | N          | E                        | F/G             | F            |
| Roundup <sup>NS</sup>            | glyphosate <sup>NS</sup>            | P/F                    | F/G         | G/E            | G                      | F/G               | G/E        | G/E                      | G/E             | G/E          |
| Stinger                          | clopyralid                          | G/E                    | G/E         | -              | -                      | -                 | N          | G/E                      | G/E             | F            |
| Telar                            | chlorsulfuron                       | P/F                    | -           | -              | -                      | -                 | -          | G/E                      | F/G             | G/E          |
| Tordon*                          | picloram                            | E                      | -           | -              | -                      | G                 | N          | G/E                      | G               | -            |
| Weedmaster                       | 2,4-D + dicamba                     | E                      | G/E         | F              | -                      | -                 | N          | G/E                      | F/G             | G/E          |
| 2,4-D                            | 2,4-D                               | F/G                    | F/G         | F              | -                      | F/G               | N          | G                        | F               | G/E          |
| 2,4-D + glyphosate <sup>NS</sup> | 2,4-D + glyphosate <sup>NS</sup>    | -                      | -           | -              | -                      | -                 | -          | -                        | G               | -            |

**Control ratings:** E=excellent (90-100%); G=good (80-90%); F=fair (60-80%); P=poor (<60%); N=none (0%); -=no information.

\*Restricted-use product in Wisconsin. <sup>NS</sup>Nonselective herbicide, will injure both grasses and broadleaf plants.

### Time Spent Controlling Invasive Species in Brown County Municipalities



#### Special Thanks To:

UW-Green Bay, Biodiversity Department  
 N.E.W. Invasive Species Endowment Committee  
 Green Bay Wildlife Sanctuary  
 Brown County Land Conservation Department  
 UW Madison, College of Agriculture Science  
 N.E.W. Master Gardener Association  
 Baird Creek Preservation Foundation  
 Wisconsin Department of Ag Trade & Consumer Protection  
 Brown County Participating Cities, Villages & Townships

University of Wisconsin, U.S. Department of Agriculture and  
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**UW**  
**Extension**  
 Cooperative Extension



# BILL WRIGHT

COMMUNITY GARDEN COORDINATOR FOR UW-EXTENSION

## Growing guru.

Bill Wright shares his green thumb with Northeast Wisconsin. His mission and life vision is to educate, garden and "grow healthy" citizens in Green Bay.

Wright is an educator, innovator and leader in his role at UW-Extension as the community garden coordinator. His primary work responsibilities are to provide individuals with the skills and knowledge necessary to grow their own fruits and vegetables. This is accomplished through classroom sessions and hands-on classes.

He then matches interested gardeners with suitable land available through the city and county on which to grow their produce. Approximately 140 gardeners are part of the program each year.

Wright also takes his expertise into the community with educational programs directed at improving the health and habits of all ages.

Wright believed creating school gardens were the most effective tool to teach children about food and nutrition. Unfortunately the majority of Northeast Wisconsin's growing season falls outside the school year.

This problem solver designed the Microfarm, a portable garden to be used in the classroom.

His prototype was tested at McAuliffe Elementary School in Green Bay, at which students grew kale in their classroom garden. While he educated the students on how food was grown, he was able to introduce many to this healthy veggie that was served in the school cafeteria.

***Wright takes his expertise into the community with educational programs directed at improving the health and habits of all ages.***

Wright's classroom innovation was documented in a "how-to" manual and shared with classrooms throughout the country.

He broadcasts his "eat healthy" convictions on the airwaves. Collaboration between Wright and NBC-26 resulted in a "Growing Healthy" series. The program is on the news twice a month and focuses on education and the initiatives taken by area groups to combat obesity. Wright has been participating in the series since September 2010; the program is scheduled to continue into summer 2011.

He also has been the driver behind the gardening and arthritis program. By sharing tips and techniques on how to reduce stress on joints, Wright achieves his mission of keeping people in their gardens.